

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

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associating sets of attributes with pay categories;  
associating a compensation qualifier with each pay category;  
splitting the employee's shifts into sub-shifts, responsive  
to work parameters; and  
for each sub-shift,  
determining a set of attributes for the sub-shift,  
determining a pay category with which the set of  
attributes is associated,  
assigning the pay category to the sub-shift, and  
determining compensation for the employee for the sub-  
shift, responsive to the assigned pay category, the  
employee's base pay and a compensation qualifier associated  
with the pay category.

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9. The method of claim 1, wherein plural compensation qualifiers  
are associated with a pay category, each compensation qualifier  
being in effect for a different time of day.

10. The method of claim 1, wherein the compensation qualifier  
comprises a pay multiplier, such that determining compensation for  
the employee for the sub-shift comprises multiplying the  
employee's base pay by the pay multiplier.

Application No. 09/524,310

Filed March 14, 2000

Group Art Unit 2167

11. The method of claim 1, wherein the compensation qualifier comprises a pay adder, such that determining compensation for the employee for the sub-shift comprises adding the pay adder to the employee's base pay.

13. The method of claim 1, wherein the compensation qualifier comprises a bonus time, such that determining compensation for the employee for the sub-shift comprises awarding the employee the bonus time.

33. A method for calculating an employee's compensation for a pay period, comprising, in a data processor:

associating sets of parameters with pay categories, a compensation qualifier being associated with each pay category;

obtaining the employee's punch information;

determining time segments responsive to the punch information;

for each time segment,

determining a set of valid parameters according to a set of rules,

Application No. 09/524,310

Filed March 14, 2000

Group Art Unit 2167

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determining a pay category associated with the set of valid parameters, and

calculating the employee's compensation for the time segment responsive to the pay category, the employee's base pay and a compensation qualifier associated with the pay category; and

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determining the employee's compensation for the pay period responsive to the calculated compensations determined for time segments within the pay period.

34. A time and attendance system, comprising:

a database for storing punch data; and

a calculation engine which calculates an employee's compensation responsive to the stored punch data, the calculation engine comprising:

means for determining subshifts, responsive to the stored punch data and to work parameters,

means for associating at least one attribute with each subshift,

a user-configurable mapping which maps each of a plurality of unique sets of attributes to at least one pay category, such that a particular subshift can be associated,

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

through the mapping and responsive to the set of attributes with which the particular subshift is associated, with the respective at least one pay category to which the set of attributes is mapped, and

means for determining compensation for a subshift responsive to the respective at least one pay category.

35. A computer program product for calculating an employee's compensation, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:

associates sets of attributes with pay categories, a compensation qualifier being associated with each pay category;

splits the employee's shifts into sub-shifts, responsive to work parameters; and

for each sub-shift,

determines a set of attributes for the sub-shift,

determines a pay category with which the set of attributes is associated,

assigns the pay category to the sub-shift, and

determines compensation for the employee for the sub-shift, responsive to the assigned pay category, the

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

employee's base pay and a compensation qualifier associated with the assigned pay category.

36. A computer data signal embodied in a carrier wave, comprising:

program code which associates sets of attributes with pay categories, a compensation qualifier being associated with each pay category;

program code which splits the employee's shifts into sub-shifts, responsive to work parameters;

program code which associates a set of attributes with a sub-shift; and

program code which determines compensation for the employee for the sub-shift, responsive to pay categories associated with the set of attributes associated with the sub-shift, the employee's base pay and compensation qualifiers associated with the pay categories.

Please add new claims 37-60.

37. A method for calculating an employee's compensation, comprising, in a processor:

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

associating sets of attributes with pay categories by creating a user-configurable mapping which maps each set of attributes to at least one pay category;

splitting the employee's shifts into sub-shifts, responsive to work parameters; and

for each sub-shift,

determining a set of attributes for the sub-shift,

determining a pay category with which the set of attributes is associated responsive to the mapping,

assigning the pay category to the sub-shift, and

determining compensation for the employee for the sub-shift, responsive to the assigned pay category.

38. The method of claim 37, wherein each set of attributes is a unique combination of attributes.


39. The method of claim 37, wherein work parameters comprise at least one of workplace rules, scheduled time, holiday calendars, dates and times of the shift.

40. The method of claim 37, wherein a subshift comprises one or more contiguous intervals having common attributes.

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

41. The method of claim 37, wherein the mapping is configurable by a user.

42. The method of claim 37, further comprising determining a total compensation for an employee for a pay period by adding the amounts determined for each subshift of the pay period.

 43. The method of claim 37, further comprising:  
setting a threshold for a first pay category;  
defining an over flow pay category;  
calculating for a given period, a total time awarded to the first pay category; and  
if the total time awarded to the first pay category exceeds the threshold, transferring the excess awarded time to the overflow pay category.

44. The method of claim 43, wherein the period comprises one day.

45. The method of claim 43, wherein the period comprises one week.

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

46. The method of claim 37, wherein an employee's actual compensation is calculated based on actual attendance and applicable compensation rules.

47. The method of claim 46, wherein the actual attendance is determined from collected punch information.

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48. The method of claim 47, wherein punch information is collected by a reader through which encoded cards are swiped.

49. The method of claim 47, wherein punch information is collected by a biometrics device.

50. The method of claim 47, wherein punch information is stored in a database.

51. The method of claim 47, wherein punch information comprises any or all of IN/OUT information, timestamps, and break indications.



Application No. 09/524,310

Filed March 14, 2000

Group Art Unit 2167

52. The method of claim 37, wherein an employee's budgeted compensation is calculated based on the employee's assignment schedule.

53. The method of claim 37, wherein an employee's forecasted compensation is calculated based on the employee's actual attendance for a selected period, and the employee's assignment schedule.

54. The method of claim 37, wherein determining compensation for the employee for the sub-shift is responsive to a pay policy.

55. The method of claim 37, further comprising forming a completed shift, responsive to identified transactions and the employee's schedule.

56. The method of claim 55, wherein transactions comprise in punches and out punches.

57. The method of claim 37, wherein each sub-shift is classified as to which attributes are in effect.

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

58. The method of claim 57, wherein attributes comprise any or all of premiums, special pay, overtime, schedule deviation, holidays, and specially designated days.

59. A computer program product for calculating an employee's compensation, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:

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associates sets of attributes with pay categories by creating a user-configurable mapping which maps each set of attributes to at least one pay category;

splits the employee's shifts into sub-shifts, responsive to work parameters; and

for each sub-shift,

determines a set of attributes for the sub-shift,

determines a pay category with which the set of attributes is associated, responsive to the mapping,

assigns the pay category to the sub-shift, and

determines compensation for the employee for the sub-shift, responsive to the assigned pay category.

Application No. 09/524,310  
Filed March 14, 2000  
Group Art Unit 2167

60. A computer data signal embodied in a carrier wave,  
comprising:

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program code which associates sets of attributes with pay  
categories by creating a user-configurable mapping which maps each  
set of attributes to at least one pay category;

program code which splits the employee's shifts into sub-  
shifts, responsive to work parameters;

program code which associates a set of attributes with a sub-  
shift; and

program code which determines compensation for the employee  
for the sub-shift, responsive to pay categories associated with  
the set of attributes associated with the sub-shift, responsive to  
the mapping.

#### REMARKS

Prior to this amendment, claims 1-36 were pending in this  
application. Applicants note with appreciation that claims 8-16  
would be allowable if rewritten in independent form, including all  
of the limitations of the base claim and any intervening claims.  
All other claims have been rejected.

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